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## **MEMORANDUM**

**TO:** Patrick Goddard, Director of Facilities, Town of Lexington

Paul B. Ash, Ph.D., Superintendent, Lexington Public Schools, Estabrook Advisory

Committee

**FROM:** Matt A. Fragala, M.S., C.I.H., Senior Scientist

**DATE:** January 23, 2012

**RE:** Surface Samples Collected on December 29, 2011, at Estabrook Elementary School,

Lexington, Massachusetts (EH&E 17892)

Environmental Health & Engineering, Inc. (EH&E) provides this memorandum of the most recent surface sampling at Estabrook Elementary School (Estabrook). The objective of the surface sampling was the continued evaluation of the effectiveness of the encapsulant applied to polychlorinated biphenyl (PCB)-containing caulk on windows and wall panels. This was accomplished by measuring concentrations of PCBs in surface dust inside Estabrook and on top of the encapsulated surfaces. Results were evaluated according to the criteria outlined in the October 19, 2011, Operations and Maintenance (O&M) Plan. According to the O&M Plan, surface samples must meet the following criteria:

- Potential exposure to PCBs in surface dust shall be controlled to as low as reasonably achievable, and in all cases surface dust PCB concentrations shall comply with the criteria set forth by the U.S. Environmental Protection Agency (EPA) of 1 microgram per 100 square centimeters (μg/100 cm²).
- Potential exposure to PCBs on encapsulated surfaces shall be controlled to as low as reasonably achievable, and in all cases comply with criterion set forth by the EPA of 1 μg/100 cm<sup>2</sup>.

Sample results provided in Table 1 indicate that PCBs were not detected above the detection limit of 1  $\mu$ g/100 cm<sup>2</sup> in any of the 20 locations sampled on December 29, 2011, (PCBs were also not detected above the detection limit of 1  $\mu$ g/100 cm<sup>2</sup> in any of the four quality assurance

samples collected). All sample results meet the surface criteria established by EPA as outlined in the O&M Plan. These results indicate that encapsulation of the interior and exterior surfaces remain effective. Sample locations are provided in the attached drawing.

**Table 1** Wipe Sample Results for Polychlorinated Biphenyls from Estabrook School, 117 Grove Street, Lexington, Massachusetts, December 29, 2011

Sample ID	Description	Aroclor 1248 <sup>1,2</sup> (μg/100cm <sup>2</sup> )
Surface Dust		
114384	Room 6, student desktop	BRL <1
114386	Room 3, student desktop	BRL <1
114387	Room 3, student desktop (duplicate of 114386)	BRL <1
114390	Room 2, student table	BRL <1
114392	Field blank	BRL <1
114393	Room 11, student desktop	BRL <1
114395	Room 22, student desktop	BRL <1
114397	Room 25, student desktop	BRL <1
114399	Room 31A, student desktop	BRL <1
Encapsulated Surfaces		
114385	Room 6, fourth window from right	BRL <1
114388	Room 3, third window from left	BRL <1
114389	Room 3, third window from left (duplicate of 114388)	BRL <1
114391	Room 2, far right window	BRL <1
114394	Room 11, third window from left	BRL <1
114396	Room 22, third window from right	BRL <1
114398	Room 25, far left window	BRL <1
114400	Room 31A, second window from right	BRL <1
114401	Room 31A, second window from right (duplicate of 114400)	BRL <1
114402	Media blank	BRL <1
114403	Room 31A, second window from left (outdoors)	BRL <1
114404	Entrance, first window to right of door (outdoors)	BRL <1
114405	Library, third window from right (outdoors)	BRL <1
114406	Room 6, fourth window from left (outdoors)	BRL <1
114407	Room 2, first window on left (outdoors)	BRL <1

μg/100cm<sup>2</sup> microgram per 100 square centimeters below reporting limit

< less than

If you have any questions regarding the information within this memorandum, please do not hesitate to contact us at 1-800-TALK EHE (1-800-825-5343).

Attachment: Surface Wipe Sample Locations

PCB concentration analysis performed by Alpha Analytical, Inc., using U.S. Environmental Protection Agency (EPA) Method 8082 (GC/ECD).

Aroclor 1016, 1221, 1232, 1242, 1254, and 1260 also tested. All results below reporting levels, unless noted.

